

Review on the recorded (cetacean) Whales and dolphins from Arabian Gulf

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Abstract

The study by marine mammals were carried out when the researchers got the samples from these animals by chance, this in my opinion is due to the lack of whaling industry in the gulf to record the species by the author was in 1969 when they found the Bryde Whale near Um Qasir – Iraq.

Four species of Whales were recorded, Humpback Whale (*maquptra indica*) 1959 - Iraqi water, Blue Whale (*Balaenoptera musculus*) 1979 – Kuwait, Bryde Whale (*Balaenoptera edeni*) 1969 – Um Qasir - Iraq, Common Rorqual (*Balaenoptera physalus*) 1978 UAE shores.

Four other species of Dolphins were recorded also, *sotalia lentiginosa* 1970 – Iraqi shore, *Tursiops adancus* 1974 on Fao shore, *Pseudorca Crasidens* 1971– Kathima shore - Kuwait, *Neophocaena phocaenides* 1975 – Iraqi waters, all the species of whales and Dolphins were stranded on the Arabian shores of the Gulf from Shatt Al -Arab estuary to the costs of UAE. Very few scientific articles were published on the cetacea of the Gulf mostly were by the author

الخلاصة:

ان دراسة الثدييات البحرية في الخليج العربي اعتمدت على مايعثر عليه من نماذج لهذه الحيوانات مصادفة ولم توضع خطط مسبقة لدراسة هذه المجموعة وذلك راجع الى عدم وجود صناعة صيد الحيتان في الخليج وقد بدأ اهتمام المؤلف بهذه المجموعة عندما عثر على حوت أم قصر نافقة عام 1967. وسجلت عام 1969

لقد تم تسجيل أربعة أنواع من الحيتان للمرة الاولى في الخليج وهي الحوت الاحدب Hampack whale في منطقة الفاو عام 1971 وحوت بريدي (حوت أم قصر) Bry de whale عام 1969 قرب ميناء أم قصر والحوت الازرق Blue whale في شواطئ الكويت عام 1971 وحوت الزعنفة common rorqual في شواطئ الامارات العربية المتحدة عام 1978. كذلك سجلت أربعة دولفينيات للمرة الاولى هي دولفين عنق الزجاجة عام 1974 من الفاو والحوت القاتل الكاذب عام 1971 في شواطئ كاظمة- الكويت- ودولفين عديم الزعنفة عام 1975 من المياه العراقية ودولفين ذو السنام عام 1970 من المياه العراقية (Plate 1 and 2)

ان التسجيلات للحيتان والدولفينيات في الخليج قليلة جدا" وأن معظم هذه التسجيلات التي تمت لحد الان كانت من قبل

المؤلف.

Introduction

The Arabian Gulf reach in many species of marine mammals such as Whales , dolphins and (dogong dogon) Which repaired to gulf on small groups like Whales , others make limit local migration like Dolphins or it dose not leave their places and remains in the shallow coasts which have the suitable sea plants for their life such as (dogong donon) Arabian gulf one of the warm gulf who encourage the Whales to come from the international seas and oceans , in addition , it has good fish stock and good amount of Shrimp which considere as favorite food for huge Whales in the world . The studies about mammal were curried out when the researchers got the samples by chance, this in my opinion marine due to the lack of Whaling industry , and these animals dos not used economically in the region , that's why the institutes ,scientific centers and most Arab universities dos not study this group of animals and shift there interest researches to food security and pollution except University of Basrah which study this field since the foundation of Natural History Museum in 1970, and before that when they found Bryde Whale near Um Qasir port in 1967. Since that time the museum start collecting the simple scientific data and notes about some Animals of this group from stranded animalsor from references , as we will show these records and there scientific **taxonomy** .

Bryde`s Whale *Balaenoptera edeni*

Recorded by Mahdi 1967 and by Al-Robaae 1969

The specimen of *Balaenoptera edeni* Anderson, 1878, from port Umm Qasr, was a male (fig. 3) stranded on the coast of southern Iraq on 5th February 1967 and was transported by a ship belonging to the Iraq General Port directorate (see also MAHDI, 1967) . It was found in khor Al Zubeir four miles north-west from port Umm Qasr, in the area between 30 and 25 north latitude and was brought to the Bank of Umm Qasr . The General port directorate also informed me that on 1st March 1967, another whale was sighting swimming in the waters of Khor Abdullah twelve miles south of Umm Qasr by an Iraqi ship . Although the ship was very near to the animal , nobody could identify the species .

The carcass of the whale was examined in detail and many "black and white" photographs were taken. A color film was also made and the observed characteristics compared with those of the published records of other balaenoptera . In collaboration with Dr. P.E.Purves of the British Museum (Natural History) it was agreed that the specimen was that of Balaenoptera adeni . The external characters did not differ materially from those which were described by Gibson-Hill (1950) . The dorsal surface was uniformly bluish black , fading into a paler shade of gray on the ventral surface. The throat grooves were dark gray in colour ventrally, out becoming much lighter on the lateral aspect and almost totally white posteriorly . The baleen plates were black and relatively very short compared with those of the other balaenoptera , (fig.1). The distal ends of the blades , on the oral aspect of the buccal cavity were broken into thickly matted , yellow fibres of much coarser texture than those of B.borealis . Lesson, 1828 . Immediately ventral to the flippers, which were very short, there were large patches of play gray . The dorsal surface of the head was marked by a pair of anteroposteriorly directed ridges (fig.2) on either side of a medium ridge as described by Omura (1962) . These ridges indicated the position of a series of tactile hairs.

Reason of death of Whales

The offshore variety feed upon a mixture of krill (Euphausid) and offshore fish such as Maurolicus , lepidion, scombersox and scomboid. Mahdi(1967)has reported that several species of marine fish invade the lower reaches of rivers and southern lakes of Iraq to breed and that anchovies have been found as far up as Basrah . these facts might indicates that the Umm Qasr specimen was one of the inshore variety which had followed anchovies into KhorAbdulla and become stranded at low tide . if

the whale sighted 4 mile off Umm Qasr on first march was also Bryde's whale , the presence of migratory small fish at this time of the year would be almost a certainty and corroborative evidence from biological field work is clearly needed . now the average depth of the water at umm Qasr at high and low water as taken from Admiralty charts is 15.6feet and 13.9 feet respectively

This is relatively shallow water for an animal the size of Bryde's whale and it is doubtful whether they would venture into these waters in normal circumstances.

However, the high water mark during the spring tide is nearly 18 feet and the whales might be persuaded to enter the narrows if they were following fish shoals . the low water mark at spring tide is only 1.5 which would mean the inevitable stranding of the animal if it did not follow the ebb tide .

It is well know that in narrow channels of the khor Zubeir and the khor Sakaa type, the flood and ebb tides take place extremely rapidly , with a fair period of slack water in between . if these were the circumstances which prevailed at the time , I consider that the stranding was inevitable.

Blue Whale (*Balaenoptera musculus*) – (Linnaeus 1758) .

Recorded By . (Blanford, 1876) dead specimen and by Al-Rebaae (1969) an skeleton

Great Blue Whale , El- Hoodt El- Azrak (Arabic) .

(Balana) musculus (Linnaeus 1758) . Syst . Nat . ed . 10 .

1:76 . True 1898 , Proc . U.S. Nat . Mus. , 21629 .

Type History :-- Thoma 1911 Proc .Zooi . Soc . London .

1911 , 2: 156 (Type History) .

A dead whale was found entangled in the submarine telegraph cable , and for years a large whale haunted the harbour of Masket in Arabia . Another whale was found in " Kadhuma " on the Kuwait Coast on June 6, 1963 in muddy area . Its Skeleton was mounted by Natural History Museum In Shuaikh Secondary School , Kuwait .

Humpback whale (*Magaptera Indica*) (Gerais 1883)

Recorded by : (R. Hatt , 1959) as that mentioned in the introduction

El-hoodt E-Ahdab (Arabic) Ba'aena novaeangliae-borowsk . Gemmein . Naturgesch des Tierreichs Berlin 2 , 1 – (1781) 21 .

A vertebra and a rib of a whale that are said to have been found about 1945 during the construction of a wall near Fao are now in the Iraqi Natural History Museum (Bashir Allous in litt) .

There is an old report that a Turkish gunboat killed this whale about a century ago in Shatt – AL-Arab .

The Common rorqual; *Balaenoptera physalus*

Recorded By: **Al-Robaee, 1978**

One whale got stranded in Khor –al-Hamra , Ras –al-Khaima (UAE) on 6 April 1978 (Fig. 5) .The Natural History Museum of the United Arab Emirates University was informed about the whale standing and we visited the area and saw the whale on the next day . We were told that the whale was alive but with little movement when stranded on 6 April by the time we reached the whale it was dead and partly putrefied by the intense sun.

We tried to pull the whale to the dry shore but could not succeed . The cars could not reach near the whale for pulling because of the muddy loose ground . Ultimately we dug a hole bigger than the size of the whale by the side of it and rolled the whale into it and thus buried it the intertidal zone. After about a year the bones were dug out . The skeleton was remarkably clean of oil . We washed the bones and put in the sun on the shore for two weeks . All bones were marked to indicate their respective positions and taken to the Museum . The skeleton is now exhibition in the Natural History Museum of the UAE University . Except for a few phalanges on both sides , the overall colouration at the time of our visit was dark, the dorsal side more so than

the ventral side . We photographed the specimen and took the measurements. The measurements in cm are : Total length : 1350 ; Length of flipper : 150 ; Width of flipper : 34 ; Snout to nostril : 230 ; Snout to eye : 244 ; Snout to lower jaw : 300 ; Circumference (between flipper and eyes : 500 ; Number of ventral grooves : 80 ; Length of groove (longest) : 1000 ; length of dorsal fin : 48 ; Height of dorsal fin : 40 ; and Length of penis : 120 (Fig.3)

The whales recorded from the Arab Gulf to date are : *B. musculus* (Blanford , 1876 and Al-Robaee , 1971) , *B. edent* (Mahdi , 1967 and Al-Robaee, 1969) and *Megaptera novaeangliae* (Hatt, 1959) . Therefore, the present finding of the Common Rorqual *Balaenoptera physalus* from the southern part of the Arab Gulf is a new record for the Arab Gulf) .

False killer whale *Pseudorca crassidens*

A new record for Arab Gulf

Recorded by: Al-Robaee, 1964

The specimen was found in 1964 in Dowha, 40 km south of Kuwait City, in a muddy area. The skeleton of this is now mounted and displayed in the Natural History Museum, Kuwait, is nearly complete (plate 3) having the following measurements:

Total length of the skeleton (without intervertebral discs)	500 cm
Total length of the skull	66 cm
Total length of the sternum	40 cm
Skeleton of the flipper	71 cm
Length of the scapula	34 cm
Teeth 10/10 each side of the jaw	

The remaining teeth in the upper jaw (3 only) are large and strong and are circular than oval in cross-section.

The generally matured False Killer Whale *Pseudorca crassidens* has a length varying from 3.25 to 3.8 meters. The maximum length recorded is 6 meters and 4.75 for male and female respectively (Walker, 1964). The five meters length of the skeleton without discs between the vertebrae indicates that the fresh specimen with the soft parts had a length more than five meters.

Although *Pseudorca crassidens* superficially resembles *Orcinus orca* (Killer Whale), they could be identified from each other on the basis of external coloration for *P. crassidens* has an overall black coloration while in *O. orca* it is black and white (the white extends ventrally from the tip of the lower jaw to about three fourth of the body and at the rear end it extends to the side of the body making a large white patch on either side. Also there is a white patch just above and behind the eye). Mr. Abdul Mohsin Al-Rashid, Director of Audio Visual Aids Department who has seen the fresh specimen affirms that the overall coloration was black and there was no white.

The teeth of *P. crassidens* are large and strong as in *O. orca* but circular in cross-section instead oval as in the latter. The three remaining teeth are more circular than oval in section.

From the overall coloration of the specimen (as told by Mr. Al-Rashid), the shape of the teeth in cross section together with the comparison I made of the photographs of the skeleton compared with the skeleton of *O. orca* which mounted in the Meereskunde Museum in Stralsund (German, Democratic Republic), led me to the conclusion that the specimen belongs to *Pseudorca crassidens*. A few Photographs of the skeleton was send to Dr. F. C. Fraser of British Museum (National History). In his reply he says "Those (the photographs) that are labeled *Pseudorca crassidens* are certainly that species".

WORLD DISTRIBUTION

Eastern Atlantic; from North and Baltic seas to Mediterranean and Cape of good hope; western Atlantic; from North Carolina to Caribbean Sea and Buenos Aires, Argentina; eastern Pacific; from Washington to Guerrero, Mexico, and Paita, Peru; western Pacific from Japan to Australia. Tasmania, and New Zealand; Indian Ocean (Ceylon Southern India).

Tomilin (1957) includes David Strait, North Atlantic, in the range, citing as authority Miller (1921). The latter, however, pointed out that this record is an error originated in a misinterpretation by True (1889) of an erroneous catalog entry.

Later Tomilin adds Brazil, in the Atlantic, the Aleutian and Kurile Chains and Galapagos, in the Pacific, to the distribution. (Hershkovitz 1966).

The species *Pseudorca crassidens* distributed also in the area of Indian Ocean (Ceylon, Southern India). It was neither recorded in Arabian sea nor in Arab Gulf.

The Speckled dolphin *Sotalia lentiginosa*, Gray 1866

Recorded by: Al-Robaee, 1967 first record

A male dolphin of the Speckled Dolphin was caught in a branch of the Khur Al Zubair, an Iraqi part of the Arabian Gulf, by fisherman on the July 24th, 1967. The specimen has been preserved in the department of zoology of the Basra University. (fig. 2).

There exists no report about the porpoises of the Arabian Gulf except that of Pruyns (1950) about *Sotalia plumbea*. Hatt (1959) mentioned that porpoises were reported in the Bamishir river near Mohammerah, but he did not see anyone in the Euphrates. Kinnear (1916) however has reported the presence of dolphins and porpoises in the Shatt-al-Arab.

The author has sighting many dolphins swimming and diving in the area of Fao,

the estuary of the Shatt-al-Arab near the Arabian Gulf, from the end of spring to the end of summer. Many dolphins have been sighting swimming in the Shat-el-Arab north to Abu Al-Khasib.

Cheesman (1926) has stated that porpoises ranged throughout the whole Persian (Arabian) Gulf . The author sighting numbers of dolphins in the Gulf near the port Um Qassir, Bubiyan Island and the coast of Hacham Island.

A skeleton of a dolphin belonging to the genus *Sotalia* was called by Mr. Mustafa Jassim, chief designer of the port Um Qassir on November 15th, 1968 on the Kuwait coast. The authot too sighting many dolphins swimming in the area. He has identified the specimens kept in the Museum of Natural History in Kuwait as belonging to the genus *Sotalia*. Another dolphin in the collection, the skeleton only, may be a false killer whale (*Pseudorca crassidens*). Further studies on the two specimens mentioned above are in preperation and will be published later on.

The distribution of the species ranges from the Bay of Bengal to Ceylon and west to the east and south Africa, and questionably included among the cetaceans of Australian water (Hershkovitz 1966).

The specimen of the present paper taken in the Khur al Zubair resembles well with Owens and Lydekker (1903, 1909) description of *Lentiginosa*. The length of the fusiform body is 220 cm. The back is somewhat rounded in front of the dorsal fin and keels behind it, to proceed downwards and backwards to the end of the tail where it shows a slight grove, before ending into a sharp elevation. The dorsal fin is 14.8 cm high, the width of the flike 50.2 cm. The tooth formula of the lower and upper jaw is 74/68. The dorsal color of the animal is a dark brown, the ventral surface lighter. The massive hump formation on the back with the dorsal fin on it is a good sign of recognition. So the Khur Al Zubair-specimen is the first record of *Sotalia Lentiginosa* from the Arabian Gulf.

Tursiops Aduncus *Bottle Nosed Dolphin*: Anew Record For Arab Gulf.

Recorded by: Al-Robaae, 1974

One dolphin was collected on 15 January 1974 from Ras Al – Mataf, Arab Gulf by a fishing boat. Mr: Bashir Zahroon of the Iraqi National Fisherris Company has presented the specimen to the Museum:

The dead dolphin was black on the back and light gray on the belly. The black around the eye extended anteriorly (see Plat 2). The specimen has been identified as a male Tursiops aduncus (Ehrenburg, 1832). The measurements are given below:

Total length 2 m.

Pectoral fin 35 cm.

Height of dorsal fin 21 cm.

Width of the flukes 54 cm.

The lower jaw contained 26 teeth on side while the upper jaw had only 25 teeth on each side; each tooth measured about one centimeter in diameter:

The present collection of T. aduncus from Arab Gulf are the first record of this species from this region. The distribution of this species as by (Hershkovitz 1966) is as follows:

Distribution:

Indian Ocean: from the Red Sea and South Africa to Bay of Bengal and Australia
Pacific: from New Zealand, Australia, Indonesia, and China Seas, on the west to American waters from Baja California to Chile, on the east; Atlantic Ocean; from Gulf of San Matias, Rio Negro, Argentina to Rio de la Plata and in the Rio Uruguay to Paysandu, Uruguay, and off Rio Grande do Sul, Brazil the specimen was not recorded in the Gulf. The author recorded it as new record for the Gulf.

Asiatic Black Finless *Neophocaena Phocaenoides*

Porpois: Anew Record for the arab Gulf

Recorded by: Al-Robaae, 1974

One dead male porpoise (plate 2) was collected from the Iraqi territorial waters in the Arab Gulf (c. 37 km south of Fao) on 2 May 1974 by a ship belonging to the Iraqi Ports Administration. Another porpoise , was caught by a fishing trawler owned by the Iraqi National Fishing Company from Fao area on 15 April 1975. Both the specimens were presented to the Basrah Natural History Museum and are present in the Mammal collection. These porpoises are identified as belonging to *Neophocaena Phocaenoides* G. Cuvier, the Asiatic Black Finless Popoise.

The Measurements are as follows:

Male

Total length	155
Pectoral fin	28
Width of Flukes	51
Height of body	30
Teeth on each side of each jaw	20
Weight	30.5

The overall colour was black in both the specimens.

Hershkovits (1966) gives the distribution of this as "Indian Ocean; from South Africa to Bay of Bengal; South Pacific: from South China Sea (Sarawak), Chinese coast (Yangtze River from mouth to 1000 miles inland and in Tungting lake to coast of southern Japan. Tomilin (1962 ; Cetacea of the U.S.S.R. Fauna U.S.S.R. 79:194) adds Korea and the peripheral Malacca and Persian Gulf to the range of the genus.

Although Tomilin includes the Arab Gulf (Persian Gulf) also in the range of genus I have no knowledge of any species belonging to this genus as recorded from the Arab Gulf (Al-Robaae 1974). Therefore, the present collection forms the first record for this species from the Arab Gulf.

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Sotalia lentiginosa 1970 stranded on Iraqi shore



Tursiops aduncus 1974 on Fao shore



Pseudorca crasdisens 1971 stranded in Kathima shore-Kuwait



Neophocaena phocaenoides 1975 caught by fisherman in Fao area-Iraq



Humpback (*megaptera indica*) – Fao area 1959



Balaenoptera musculus 1971 shore of Kuwait



Balaenoptera endeni 1969 in UmQasir – Iraq



Balaenoptera physalus 1978 Ras – Alkhaina UAE

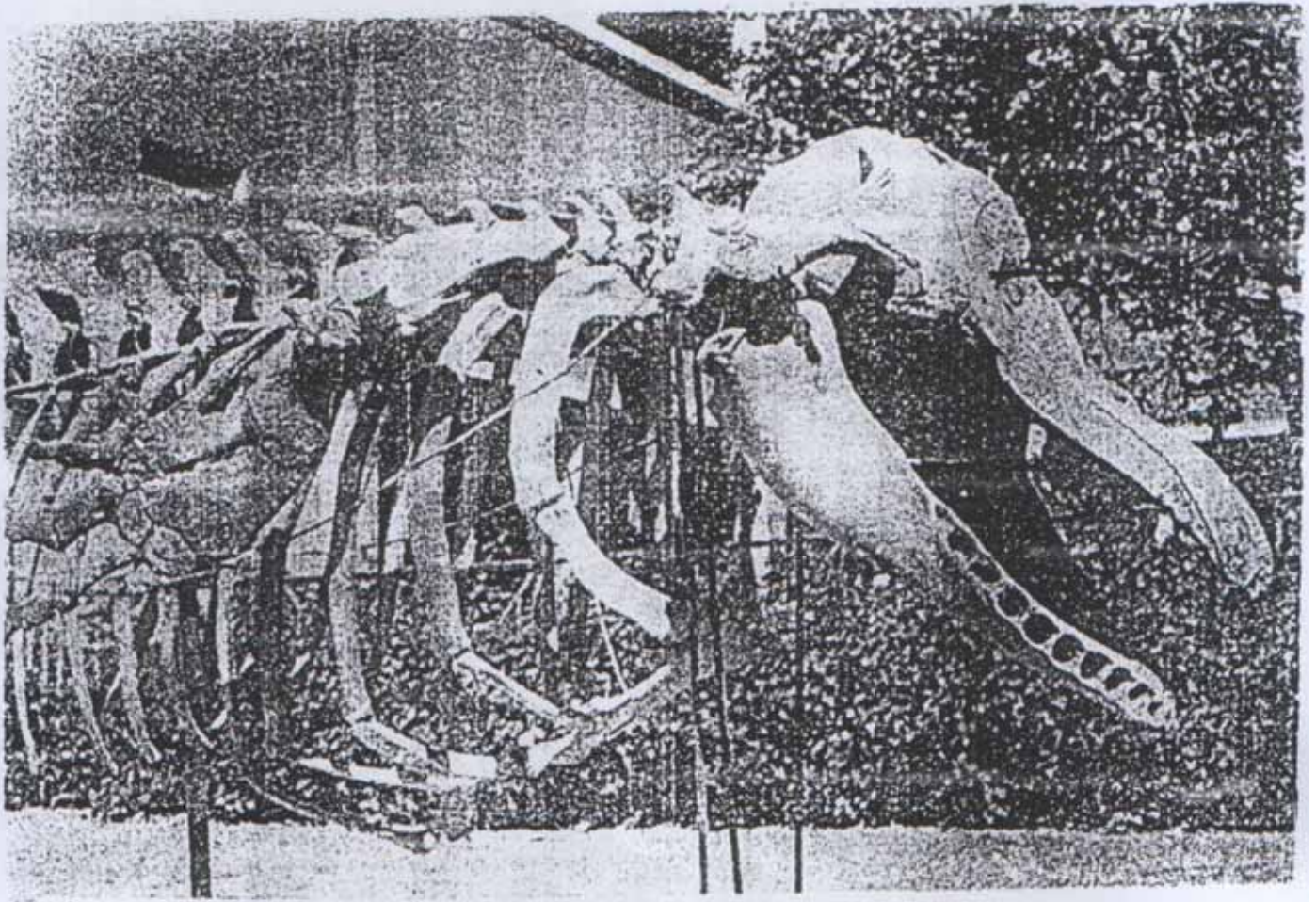


Plate 3 Skeleton of False Killer Whale *Pseudorca crassidens* (stranded on the Kuwaiti coast) exhibited in the Natural History Museum, Kuwait.



Fig. 1 (above). Roof of oral cavity of *Balaenoptera edeni* stranded at Unam Qasr, Iraq, showing fringes of baleen plates — Fig. 2 (below). Dorsal view of head of same animal showing convergent ridges



Fig. 3 (above). Ventral view of same animal, showing mesial groove and mammary slits — Fig. 4 (below). Same animal, dorsal view of flukes showing posterior curvature of "trailing edge"

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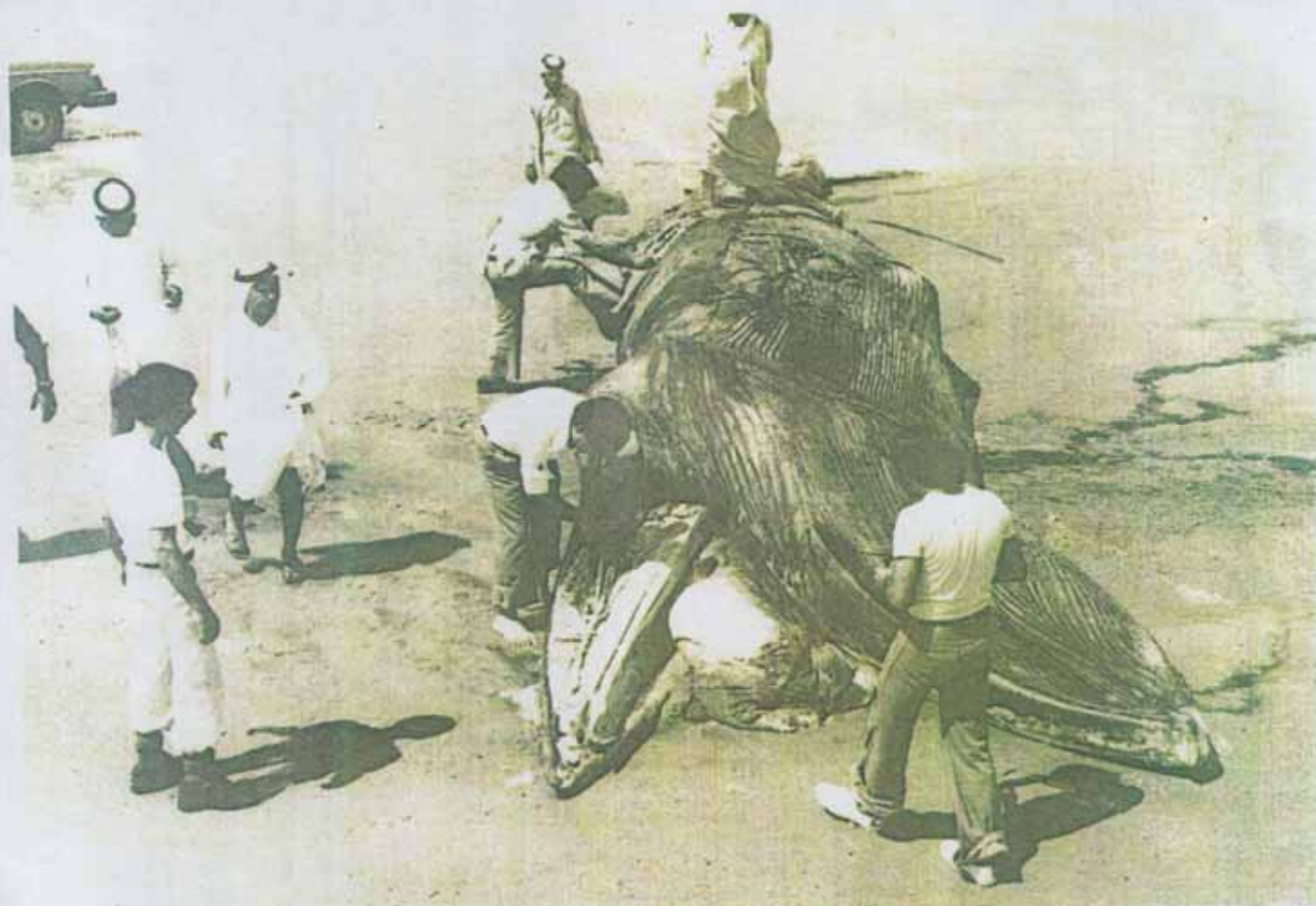


Fig. 5 *Balaenoptera physalus* stranded in Khor-al-Hamra, Ras-al-Khima on 6 April 1978. (Photo. Al-Robaee)